

axmi014	---MKNMNSYQNTNEYEILDGSPNNNTMSNRYP---FAKDPNIFPIN-----LDACQGR	48
cry1Aa	-----MDNNPNINECIPYN---CLSNPE-----VEVL	24
cry1Ac	-----MDNNPNINECIPYN---CLSNPE-----VEVL	24
cry1Ia	-----MKLKNQDKHQSFSSNAKVDKISTDS---LKNETDIELQININHEDECLMSEYE	49
cry2Aa	-----MNVLSNGRTTICDAYNVVAHDPFSFEHKSLDTIQKEMEWKRTDHSLYVAPVV	54
cry3Aa1	MIRKGRKMNNPNNRSEHDTIKTTENNEVPTNHVQYPLAETPNPTLEDLNYKEFLRMTADN	60
cry3Bb	-----MNPNNRSEHDTIKVTPNSELQTNHNPYPLADNPSTLEELNYKEFLRMTEDS	52
cry4Aa	-----MNPYQNKNEYETLNASQKLNISNNYTRYPIENSPKQLLQSTNYKDWLNMCCQN	54
cry4Ba	-----MN-----SGYPLANDLQSGMKNTNYKDWLNMCCENN	30
cry6Aa	-----MIIDSKTTLPRSLIHTIKLNSKKYCPGDMTNGNOFIISKQEWATIGAYI	51
cry7Aa	-----MNLNLD--GYEDSNRLNNSLNP---TQKALSPSLKNMNYQDFLSITERE	47
cry8Aa	-----MSPNNQNEYEIDATPSTSVSSDSNRYPFANEPTDALQNMNYKDYLKMSGGE	52
cry10Aa	-----MNPYQNKNEYEIFNAPSNGFSKSNNSRYPLANKPNQPLKNTNYKDWLNVCCDN	54
cry16Aa	-----MHYGNRNEYDILNASSNDSNMSNTYPRYPLANPQODLQNTNYKDWLNVCEG-	53
cry19Ba	-----MKEQNLNKYDEITVQAASDYDIRPIFQTNGSATFNSNTNITTLTQAINSOAGAI	55
cry24Aa	-----MNQYQNKNEYEILESSQNMMNPNRYP---FADDPNAVKNMKNYKDWVNECEGS	51
cry25Aa	-----MNPYQNKSECEILNAPLNNINMNPNYP---FANDPNAVKNMKNYKDWLNECDGI	51
cry39Aa1	-----NSYENKNEYEILNDSKK--SNMNPYLRYPPLANDSLASMQNTNYKDWLTMCDR-	51
cry40Aa1	-----NSYENKNEYEILESSNNNTNMPNRYP---FANDRDMSTMS-----FNDCQGI	44
axmi014	P-----WQDTWESVSDIVTIGTYLIQFLLEPGIGGIPVIFSIINKLIPSSQSV	97
cry1Aa	G-----GERIETGTPIDISLSLTQFLLS-EF-VPGAGFVLGLVDIIWIGIFGPSQ---	72
cry1Ac	G-----GERIETGTPIDISLSLTQFLLS-EF-VPGAGFVLGLVDIIWIGIFGPSQ---	72
cry1Ia	N-----VEPFVS-ASTIQTGIGIAGKILG-TLGVFPAGVASLYSIFILGELWP-KGKN	99
cry2Aa	G-----TVSSFLKKVGSLLG-----KRILSELWGIIFFSGSTN	88
cry3Aa1	N-----TEALDSSTTKDVIQKGISVVVGDLG-VVGFPPGALVSFYTNFLNTIWPSE--D	112
cry3Bb	S-----TEVLDNSTVKDAGTGISVVVQILG-VVGVFPAGALTSFYQSFLNTIWPSDA-D	105
cry4Aa	QQYGGDFETFDISG---ELSAYTIIVGTIVLTGFGFTTGLALIGFGTLIPVLPFAQDQS	111
cry4Ba	QQYG-VNPAAINSS---SVSTALKVAGAILK--FVNPAGTIVLTLSAVLPILWPTNTPT	84
cry6Aa	Q-----TGLGLPVNEQQLRTHVNLSQDISIPSDFSQLYDYVCSDKTSA	94
cry7Aa	Q-----PEALASGNTAINTVSVTGTALS-ALGVPGASFITNFYKILAGLLWPENGKI	99
cry8Aa	NPEL-FGNPETFIS-SSTIQTGIGIVGRILG-ALGVFPFASQIASFYFIVGQLWPSKSD	109
cry10Aa	QQYGNAGNFASSETIVGVSAGIIVVGTMLG-AFAAPVLAAGIISFGTLLPIFWQSDPA	113
cry16Aa	---YHIENPREASVRA--GLGKGLGIVSTIVG-FFGGSIIIDTIGLFYQISELLWPEDD-T	107
cry19Ba	AG-----KTALDMRHDTFRADIFLGTGKSGADGIAIAFHRGSI GFVGTGGGL	104
cry24Aa	N-----ISPPAAAITSKIIVSLVTLAKAVASSLADSIKSSLSGISKITITENN	100
cry25Aa	T-----PSIFGTGLVLASIVISTIN-LATSPSIGDAFALVSSIGEYWPETKTSF	99
cry39Aa1	--TDTD--VLSRG--AVSTGVGMLSTILS-LFGIPLIGEGIDLLIGAADFLWPESDGG	103
cry40Aa1	S-----WDEIWEASAEITISIGIDLIEFLMEPSLGGINTLFSIIGKLIPTNHQSV	93

Fig. 1A

axmi014  
cry1Aa  
cry1Ac  
cry1Ia  
cry2Aa  
cry3Aa1  
cry3Bb  
cry4Aa  
cry4Ba  
cry6Aa  
cry7Aa  
cry8Aa  
cry10Aa  
cry16Aa  
cry19Ba  
cry24Aa  
cry25Aa  
cry39Aa1  
cry40Aa1

A----ALSICDLVSIIRKEVDESVLSDGVADF-EGEMTAYQDYVYLHYLEDWLTLD----- 146  
----WDAFPVQIEQLINQRIEFAFNQAISRL--EGLSNLYQIYAESFREWEADPT----- 122  
----WDAFLVQIEQLINQRIEFAFNQAISRL--EGLSNLYQIYAESFREWEADPT----- 122  
Q---WEIFMEHVEEIIINQKISTYARNKALTDL--KGLGDALAVYHDSLESWGNRN----- 150  
L---MODILRETEQLNQLNLTDLARVNAEL--IGLOANIREFNQQVDNFLNPTQN--- 140  
P---WKAFAEQVEALMDQKIADYAKNKALAE--QGLQNNVEDYVSALSSWQKNPVS--- 164  
P---WKAFAEQVEALMDQKIADYAKNKALAE--QGLQNNVEDYVSALSSWQKNPVS--- 157  
--NTWSDFITQTKNIKEIASTYISNANKIL--NRSFNVISYHNHLKTWENPNP--- 164  
PERVWDFMTNTGNLIDQTVTVYVRTDANAKM--TVVKDYLDQYTKFTNTWKREPN--- 139  
EW--WNKNLYPLIIKSANDIASYGFYKAGDPS--IKKDYGFKKLQDELNDIVDNNSD--- 147  
----WDEFMTEVEALIDQKIEEYVNRKAIAEL--DGLGSALDKYOKALADWLKQD--- 149  
I---WGEIMERVEELVDQKIEKYVKDKALAE--KGLGNALDVYQOQSLDLEWLENRN--- 160  
N--VWQDLN-IGGRPIQIEIDKNIINVLTSIV--TPIKNQLDKYQEFFDKWEP-ART--- 164  
QYTWQDQIMNHVEDLIDKRITVEIRGNARTL--ADLQGVDDYNNWLKKWKDDPKS--- 162  
GILGAPKGIGFELDTVANAPEDVEGDSFGHGAMKGSFPSPNGYPHAGFVSTDKNSRWLS 164  
S----QVSMVQVHQIINRRIQETIIDLGESSL-NGLVAIYNRDYLGALEAWNN----- 149  
P-----LSVADVNRLLIREALDQNAINRATGKFN-GLMDTYNTVYLKNLDWYDTRIPANP 153  
HQYTWEDLMNHIIEELMDERLETEKRTTALDDL--RGLKALLGLFRDAFDSWEKNQND--- 158  
S----ALSICDLLSIIIRKEVADSVLSDAICRFLDGLKLNKYREYYPYLEAWLKDQKPLQ- 148

axmi014  
cry1Aa  
cry1Ac  
cry1Ia  
cry2Aa  
cry3Aa1  
cry3Bb  
cry4Aa  
cry4Ba  
cry6Aa  
cry7Aa  
cry8Aa  
cry10Aa  
cry16Aa  
cry19Ba  
cry24Aa  
cry25Aa  
cry39Aa1  
cry40Aa1

KSNPKKLADVVVKQFOAREEDFTKLAGSLSRQK-----AEIILLPTVYVQAANVHLLLRD 201  
--NPALREEMRIQFNDMNSALTTAIPLLAQVN-----YQVPLLSVYVQAANLHLSVLRD 174  
--NPALREEMRIQFNDMNSALTTAIPLFAVQN-----YQVPLLSVYVQAANLHLSVLRD 174  
--NTRARSVVKSQYIALLEIMFVKLPSPFAVSG-----EEVPLLPPIYAQAANLHLLLRD 202  
----PVPLSITSSVNTWQQLFLNRLPQFIQ-----YQLLLPLFAQAANMHLFIRD 190  
SRNPHSQRIRELFSQAESHFRNSMPSFAISG-----YEVFLFTTYAQAANTHLLLRD 218  
LSKRSQDRIRELFSQAESHFRNSMPSFAVSK-----FEVFLFTTYAQAANTHLLLRD 211  
Q-NTQDVRTQIQLVHYHFQNVIPELVNSCPPNPSPDCDYNNILVSSYAQAANLHLLLRD 223  
QSYRTAVITQFNLTSAKLRETAVYFNSLVG-----YELLLLPPIYAQVANFNLLLRD 191  
---DDAIAKAIKDFKARCGILIKEAKQYEEAAK-----NIVTSLDQFLHGDQKLEGVIN 199  
--DPEAILSVATEFRIIDSLFEFSPSPKVTG-----YEIPLLTVYAQAANLHLLLRD 201  
--DARTSVVSNQFIALDLNPFVSSIPSPFAVSG-----HEVLLLAIVYAQAANLHLLLRD 212  
HANAKAVHDLFTTLEPIIDKDLDMLKNNAS-----YRIPTLPAYAQIATWHLNLLKH 216  
TGNLSTLVTKFTALDSDFNGAIRTVNNOSPG-----YELLLPVYAQIANLHLLLRD 216  
ALAQMQRIAPNGRWRRLRIEIRWDARNKELTANQLDFTNDITVGEKPRTPRTATWRLVNP 224  
KSNINYQTNVAEAFKTVREFFTKLGIYRTSS-----SQITLLPTTQAANLHLSMLRD 204  
QGDSQLREARRSLEEIERDFRKALAGEFAEAG-----SQIVLLPIYAQAANLHLLLRD 208  
PIAKNRVGGYFEDVHTHFVKDMASIFS--ATN-----YEVLLLPVYAQAANLHLLLRD 210  
KTNNSDIGQLVKYFELSERDFNEILGGLARNN-----AQILLPLPYFCASCCKQLLLLRD 203

Fig. 1B

axmi014	AVYKKEWG-----LVCPLYPGSG---RTDCNERLKAKIKETNYTCVGWYKGLDQI	251
cry1Aa	VSVFQQRWGF-----AATINSRYNDLTRLIGNYTDYAVRWYNTGLERV	218
cry1AC	VSVFQQRWGF-----AATINSRYNDLTRLIGNYTDYAVRWYNTGLERV	218
cry1Ia	ASIFGKEWGLS-----SSEISTFYNRQVERAGDYSDHCVKWKYSTGLNNL	246
cry2Aa	VILNADEWGIS-----AATLRTYRDYLRNYTRDYSNYCINTYQYAFRGL	234
cry3Aa1	AQIYGEWGYE-----KEDIAEFYKRQLKLTQYETDHCVCWYVNVGLDKL	262
cry3Bb	AQVFEWEGYS-----SEDVAEFYHRQLKLTQYETDHCVCWYVNVGLNGL	255
cry4Aa	AVKFEAYLKNRQFD-----YLEPLTAIDYYPVLTKAIEDYTNVCVTTYKKGLNLI	275
cry4Ba	G-----LINAQEMS-----LAR--SAGDQLYNTMVQYTKYIAHSITWYKGLDVL	235
cry6Aa	IQR-----LKEVQALNAQAGESSPAHKELLEKV	229
cry7Aa	STLYGDKWGFT-----QNNIEENYRQKKRISEYSDHCTKWYNSGLSRL	245
cry8Aa	ASIFGEWGF-----PGEISRFYRQVQLTAEYSDYCVKWKYKIGLDKL	256
cry10Aa	AATYNIWLQNGIN-----PST--FNSSNYQYGLKRKIQYETDYCIQYNAGLTMI	267
cry16Aa	AQIYGDKWSA-----RANARDNYQIQLEKTKYETVCINWYKGLND-	260
cry19Ba	AFELDKYTFVIG-----SATGASNNLHQIGIEFDAYFTKPTIEANNVNPV	272
cry24Aa	AMVYQEGWNLQSHIN-----YSKELDDALEDYNYCVEVYTKGLNAL	246
cry25Aa	AMQFRTDLGLIRPVG-----VPITSAEDPFSEFFLLRIKKYTDHCISYYDDGLAKI	260
cry39Aa1	GVYIGSRWG-----IAPAADFYHDQLLKYTAIYANHCVTWYNNGLAQO	253
cry40Aa1	AVQYEQWFPFLSAENVRSELISPSGCDFTGDYVERLCKKIAEYTDYCEYWYQAGLNQI	263

axmi014	ROAGTSAB-----VWSKFNKFRREMTLAVLDIIAIFPYDFEKYPLA-----TSVELTR	300
cry1Aa	WGPDSR-----DWVRYNQFRRELTLVLDIVALFNSYDSRRYPPIR-----TVSQLTR	265
cry1AC	WGPDSR-----DWVRYNQFRRELTLVLDIVALFNSYDSRRYPPIR-----TVSQLTR	265
cry1Ia	RGTNAE-----SWVRYNQFRRELTLVLDIVALFNSYDTQMYPIK-----TTAQLTR	293
cry2Aa	NTRLHDMLEFR--TYMFLNVFEYVSIWSLKYQSLMVSSGANLYASG-----SGPQQTQ	286
cry3Aa1	RGSSYE-----SWVFNRYRREMTLVLDLIALFPLDVRLYPKE-----VKTELTR	309
cry3Bb	RGSTYD-----AWVKFNRFREMTLVLDLIVLFPFDIRLYSKG-----VKTELTR	302
cry4Aa	KTTSDNLGNNWNTYRTKMTTAVLDLVALFPNDVVGKYPIG-----VQSELTR	328
cry4Ba	RNKSNG-----QWITFNDYKREMTIQVLDILALFASYPDRYPADKIDNTKLSKTEFTR	289
cry6Aa	KNLKT-----LERTIKAEQDLEKKVEYSFLLGPLLGFWVEILEN-----TAVQHIK	277
cry7Aa	NGSTYE-----QWINYNRFRREMILMALDLVAVFPFDPDRYSME-----TSTQLTR	292
cry8Aa	KGTTSK-----SWLNYHQFRREMTLLVLDLVALFPNDVTHMYPPIE-----TTAQLTR	303
cry10Aa	RTNTNA-----TWNMYNTYRLEMTLVLDLIAIFPNYDPEKYPIG-----VKSELIR	314
cry16Aa	---FRTAG---QWVNFNRYRREMTLVLDLIIISMFPYDARLYPTE-----VKTELTR	306
cry19Ba	GATFNPKTYPGINLRATDEIDGDLTSKIVKANNVNTSKTGYYVT-----YVENSYGE	327
cry24Aa	R--GSTAI---DWLEFNSFRDMLVLDLVAIFPNVPVRYPLS-----TKISLSR	293
cry25Aa	RSRGS DGE---TWWEFNKFRREMTLVLDLVALYPHNIKLYPIP-----TQTFLSR	309
cry39Aa1	KELFAKSP---NWNRFNAYRDMTITVLDIIALFPTDARLYTKP-----IKTELTR	302
cry40Aa1	KQAGTGAD---TWAKFNKFRREMTLVLDLIIAIFQYDFEKKYPLP-----THVELTR	312

Fig. 1C

axmi014  
cry1Aa  
cry1Ac  
cry1Ia  
cry2Aa  
cry3Aa1  
cry3Bb  
cry4Aa  
cry4Ba  
cry6Aa  
cry7Aa  
cry8Aa  
cry10Aa  
cry16Aa  
cry19Ba  
cry24Aa  
cry25Aa  
cry39Aa1  
cry40Aa1

EIYTDVGYSG-----GNYGWERFFS--FNSVEANGTRGPGVLTWLQDAIDIYSHSINLQL 353  
EIYTNVLENFDGS-----FRG--MAQRIEQIRQPHLMDILNSITIYTDVHRGFN 314  
EIYTNVLENFDGS-----FRG--SAQIERISIRPHLMDILNSITIYTDHARGYY 314  
EVYTDAGTVHPHPSFTSTWYNNAPSAIEAAVVRNPHLLDFLEQVTIYSLLS--RW 351  
SFTAQNPFLYSLF-----QVNSNYILSGISGTRLSITFPNIGGLPGSTTTHSLNS 337  
DVLTDIVGVNNLR-----GYGTTFSNIEN-YIRKPHLFDVILHRIQHFHTRFPQGY 359  
DIFTDPIFSLNTLQ-----EYGTFLSIEN-SIRKPHLFDVILQIEFHTRLPQGYF 352  
EIYQVLNF--EES-----PYKYDFQYQEDSLTRRPHLFTWLDSLNFYEKAQTPN 377  
EIYTAL-----VES-----PSSK-SIAALEALTRDVHLFTWLKRVDFWTNTIYQDL 335  
NQIDEIKK-----QLDSAQHDLDKRDVKIIGMLNSINTDIDN----- 313  
EVYTDVLSISNP-----DTGSPFSQMENTAIRTPHLVDYLDYIYTSYKAFS 343  
DVYTDPIAFNIVTSTGFCNPWSTHSGILFYEVENNVRPPHLPDILSSVEINTSRGKITL 363  
EYITNVN-----SDTFTITELENGLTRNPTLFTWINQGRFYTRNSRDIL 359  
EIYSDVINGEIIYGL-----MTPYFSFEKAESLYTRAPHLFTWLKGRFVTNS-ISYW 357  
SDEKTIETVTFNSPTIIASDVEIEKGESFNPLTDSRVGLSAQDSLGNIDITQNVKVKSSNV 387  
KIYTDVGRDTS-PS-FGDWNTGRTLANFNDLEREVTDSPSLVKWLGDMTIYTGALDSYR 352  
VWYTDVGCFCGNRK-----SDIFSLNFDYLENRLTRPREPFYNLSVQLFASTVSN 363  
EIYSDVLNLDVYGV-----QOT--DLNKNEAFAFTRSPHLVTRLRGDFDYTRTKYAYW 352  
EIYTDVGYSS-----GTYSWLKYWTGAFTLEANGTRGPGVLTWLRSIGIYNEYVSR-- 365

axmi014  
cry1Aa  
cry1Ac  
cry1Ia  
cry2Aa  
cry3Aa1  
cry3Bb  
cry4Aa  
cry4Ba  
cry6Aa  
cry7Aa  
cry8Aa  
cry10Aa  
cry16Aa  
cry19Ba  
cry24Aa  
cry25Aa  
cry39Aa1  
cry40Aa1

GYLSG-----WGG--TRHYEDFTKNGAFAQRMSTTSNNP-----RNIIFGNTDIFKIIISL 402  
-----YWSGHQITASPVGFCPEFAFPLFGNAGNAAPP-VLVSITGLGIFRTLSS 363  
-----YWSGHQIMASPVGFCPEFTFPLYGTMGNAAPQQRIVAQLGQGVYRTLSS 364  
SNTQYMN--MWGGHLEFRTIGTLNISTQ-----GSTNTSINPVTLPFTSRDVYRTESL 404  
ARVN-----YSGGVSSGLIGATNLNHNFCSTVLPLSTPFVRSWLDSDGTDEGVATS 390  
GNDSFN--YWSGNVSTRPSIGSNDIITSPFYGNKSSEPVQ--NLEFNKEKVYRAVAN 413  
GKDSFN--YWSGNVSTRPSIGSNDIITSPFYGNKSSEPVQ--KLSFDGQKVYRTIAN 406  
N-----FFTSHYMFHYTLNDSQKSSVFGNHNVTDKLS-LGLATNIYIFLNLVI 427  
R-----FLSANKIGFSYTNSSAMQESGIYSSGFGSNLTHQIQLNSNVYKTSITDT 386  
-----LYSQOEAIKVQKLOG-----IWATIGAQIENLRTT 345  
HEIQDILF--YWSAHKVSFKKSEQSN-LYTTGIYKTSGYISS-GAYSFHGNDIYRTLAA 399  
NNDAYIN--YWSGHTLKYRRTADSTVYTA---NYGRITSEKNSFALEDRIFEINST 416  
DPYDIF--SFTGNQMAFTHTNDDRNIIWGAHVHNIISQDTSKVFPFYNRPIDKVEIV 415  
T-----FLSGQNKYSYTNSSINEGSRGQDIDYGGTSTINIPSNYSYVNLWTE 408  
DTSKPG--YEVVFEVTDSPGGKAEKDFKVTVLQPSIEANNVELEIDDSLDPLTDAKV 444  
PTSPGDRIGWYGNINAFYHTRTDVVMFRQTGDTAYEDPSTFISNIIYDDIYKDLRAA 412  
NGEVLRG--NLKNIMFEGGWTSASGDGVTGTPTFSTMDWSYGMWYPRKHAEITSR 418  
R-----YLAGHTNYFSFTGNTIYSSSFN--NWYDMDTKSTINIPDANIYKLMWTK 402  
-YFSG-----TRHYEDYTTGNGNFQRMSTTSNDL-----RDISFPNSDIFKIESK 413

Fig. 1D

axmi014	ARYAMQPFVGYSIPIRHLVSRAEFPTTLNTFLYEVNSSGYS-QTIESVLPGLNKDLPPS-	460
cry1Aa	P---LYRRRIILGSGNNQELFVLD---GTEFSFASLTTLNLPSTIYRQRTVDSLDVIPPQ	417
cry1Ac	T---LYRRPFN-IGINNQQLSVLD---GTEFAYG-TSSNLPsAVYRKSGTVDSLDLDEIPPQ	416
cry1Ia	AGLNLFLTQPVNGVPRVDFHWKFV---THPIASDNFYYPGYAGIG---TQLQDSENELPPE	459
cry2Aa	TNWQTESFQTTLSLRGAFSARGSNFYPPDYFIRNISGVPLVIRNEDLTRPLHYNQIRN-	449
cry3Aa1	TNLAVWPS-AVYSGVTKEVFSQYN---DQDEASTQTYDSKRNVG-AVS-WDSIDQLPPE	467
cry3Bb	TDVAAPNGKVYLGVTKVDFSQYD---DQKNETSQTYSKRNNG-HVSAQSDSIDQLPPE	462
cry4Aa	SLDNKYLDYNNISKMDFFITNGTRILLEKELTAGSQQITDYVNKNIFGLPILKRRENQGN	487
cry4Ba	SSP-----SNRVTKMDFYKIDGT---LASYNSNITPTPEGLRTTFEGFSTNENTPNQ--	435
cry6Aa	SLQEVQSDDADEIQIELEDASDA-----	369
cry7Aa	PSVVVYPYTON-YGVEQVEFYGVK---GHVHYRGDNKYDL-----TYDSIDQLPPD	446
cry8Aa	VANLANYQKAYGVPGSWFHMKR---GTSSTTAYLYSKTHTALOGCTQVYESSDEIPLD	473
cry10Aa	RHR-----EYSDIIYEMIFFSNSSE---VFRYSSNTIENNYKRTDSYMIKQTKWNEE--	466
cry16Aa	NYEYIYPWGDVNIITKMFNSVTDNNSKELIYGHRNTKPVVRTDFDLTNKEGTALAK-	467
cry19Ba	GLRAKDSLGNIDITKDKVFNNDTSNGKYEIVFEVTRDFGKKAESIEVLVLGEPsIE	504
cry24Aa	AVSTIQGAMD---TTFGVSSSRFFDIRGNQLYQS-NKPYPSLPITITFPGE-ESSEGN-	466
cry25Aa	SQALPGLNNSIHVIVGIDSFRAIGPGQGDHTFSLPGDMYDCGVQINPLEDYRNSDH-	477
cry39Aa1	SYTNI SPYTDVGISQMQFSLTNN---QQLTYTGSAPKYPVRETTFEIPPTDEKPLT--	457
cry40Aa1	AIMNLVGEIN-ARPEYRVsRAEFSESTAFIYLYDAGNSGLSSMTITSKLPGI-KNPEPS-	470
axmi014	-----RTNYSHRLSNAACVQNETSRVN-----VFGWTHTSMKKDNRIYDPDKITQI	505
cry1Aa	DNSVPPRAGFSHRLSHVTMLsQAAG-AVY--TLRAPTFsWQHRSAEFNNIIPSSQITQI	473
cry1Ac	NNNVPPRQGFsHRLSHVSMFRSGFSNSVS--IIRAPMFSWIHRSAEFNNIIASDSITQI	474
cry1Ia	ATGQPNYESYSHRLSHIGLISASHVK-ALV-YS-----WTHRSADRTNTIEPNsITQI	510
cry2Aa	-----IESPSGTPGGARAYLVSVHNRKN--IYAANENGTMIHLAPEDYTCFTI	496
cry3Aa1	TTDEPLEKGYSHQLNVVMCFLMQGSR-----GTIPVLTWTHKSVDFFNMIDSKKITQL	520
cry3Bb	TTDEPLEKAYSHQLNVAECFLMQDR-----GTIPFFTWTHRSVDFFNTIDAEEKITQL	515
cry4Aa	PTLFPTYDNYSHILSFITKSLsIPATYKTQV-----YTFAWTHSSVDPKNTIYTHLTQI	541
cry4Ba	-----PTVNDYTHILSYIKTDVI--DYNSNR-----VSFAWTHKIVDPNNQIYTDAITQV	483
cry6Aa	-----WLVAQEARDFTLNAYSTNSRQN	392
cry7Aa	GE--PIHEKYTHRLCHATAIFKSTP--DYD--NATIPFSWTHRSAEYNNRIYPNKITKI	500
cry8Aa	RT-VPVAESYSHRLSHITSHSFSKNG-SAY--YGSFPVFWTWTHSADLNNTIYSDKITQI	529
cry10Aa	-----YGHTLsYIKTDNYIFSvVRERR--VAFsWTHTSVDFFQNTIDLDNITQI	513
cry16Aa	-----YNDYNHILsYMLINGETFGQKRHG-----YsFATHSSVDPNNTIAANKITQI	515
cry19Ba	ANDVEVNGKETFEPLTDSRVGLRAKDSLGN---DITKDVKIKSSNVDTsKPGEYEVVFEV	561
cry24Aa	-----ANDYSHLLCDVKILQEDSSNICEG--RSSLLSHAWTHASLDRNNTILPDEITQI	518
cry25Aa	-----WISDMMTINQSvQLASNPQTAFs-----ALSGLWHHSSAGNRNVYVYDKITQI	527
cry39Aa1	-----YENYSHILsYMTs-AQHFGDKKIG-----YTFAMMHESVDFFDNRVDPDKITQI	504
cry40Aa1	-----YRDYSHRLSNAACVAGAGNSRIN-----YVGWTHTSMSKYNLIYDPDKITQI	515

Fig. 1E

axmi014  
cry1Aa  
cry1Ac  
cry1Ia  
cry2Aa  
cry3Aa1  
cry3Bb  
cry4Aa  
cry4Ba  
cry6Aa  
cry7Aa  
cry8Aa  
cry10Aa  
cry16Aa  
cry19Ba  
cry24Aa  
cry25Aa  
cry39Aa1  
cry40Aa1

PAVKAFAALPAGTGYAGGYVTAAGPGYGGDVVTLPYQAS-----LKIRLTSAPTNKNYR 558  
PLTKSTNLGSGTS-----VVGPGFTGGDILRRTPSQISTLRVNITAPL-----SQRYR 523  
PAVKGNFLNG-S-----VISGPGFTGGDLVRLNSSGNNIQNRGYIEVPIHFPPSTSTRYR 528  
PLVKAFLNLSGAA-----VVRGPGFTGGDILRRTNCTFGDIRVNINPPF-----AQRYR 560  
SPIHATQVNNQTR-----TFISEKFGNQDLSLRFQESNT-----TARYTLRGNGNSYN 544  
PLVKAYKLQSGAS-----VWAGPFTGGDIIIOCTENG-----SAATYVTP-DVYSQKYR 570  
PVVKAYALSSGAS-----IEGPGFTGGNLLFLKESNN-----SIAKFKVTLSAALLQRYR 567  
PAVKANSILGTSK-----VWQPGHTGGDLIDFKDH-----FKITCOHSNF-----QOQSYF 587  
PAVKSNFLNATAK-----VIKPGHTGGDLVALTSNGTSLGRMEIOCKTSIFNDPTRSYG 538  
LPINVISDSNCNS-----TTNMTSNQYSNPPTTNT-----SNQYM 427  
PAVKMYKLDPPST-----VVGPGFTGGDLVKRGSTGYIGDIKATVNSPL-----SQKYR 550  
PAVKGDMLYLGGS-----VWQPGFTGGDILKRTNPSILGTFAVTNGSL-----SQRYR 579  
HALKALKVSSDSK-----IVKPGHTGGDLVILKDS-----MDFRVFLKNVSRQYQ 560  
PVVKASSINGSIS-----IEKPGFTGGDLVKMRADSG-----LTMRFKAELLKKYR 563  
TDRFGKYVEKTIG--VIVPVVIDDEWEDGNVNGWKFYAG-----ODIKLLKOPDKAYK 611  
PAVTAYELRG-----NSSVWAGPGSTGGDLVKMSYHSV-----WSFKVYCS-ELKNYR 565  
PATKTVREHP-----MIKPGFTGGDLADLSSND-ILQYDLRSDDYDRLTEDVPFR 578  
PAVKGDYLYQGY-----VKQPGHTGGDLVSMIRTD-----LGINVYFPQ-LDYR 550  
PAVKAFDISD-TG--PGQVIAGPGHTGNGVNSLPPYYSR-----LKIRLIPASTNKNYL 565

axmi014  
cry1Aa  
cry1Ac  
cry1Ia  
cry2Aa  
cry3Aa1  
cry3Bb  
cry4Aa  
cry4Ba  
cry6Aa  
cry7Aa  
cry8Aa  
cry10Aa  
cry19Ba  
cry24Aa  
cry25Aa  
cry39Aa1  
cry40Aa1

VRLRYASGGPGPFVRVERWSPSSVSNANFSRPATG-----GYSSFDYVDT 602  
VRIRYASTNLQFHTSIDGRPINQNFSS--ATMSS-----GSNLQSGSFRTVGFTTP 573  
VRVRYASVTPIHNLNVNWNSSIFSNTVP--ATATS-----LDNLQSSDFGYFESANA 578  
VRIRYASTDLQFHTSINGKAINQNFSS--ATMNR-----GEDLDYKTFRTVGFTTP 610  
LYLRVSSIGNSTIRVTINGRVYTVSNVNTTNDGVN-----DNGARFSDINIGNI 595  
ARIHYASTSQITFTSLDGAFFNQYFD--KTINK-----GDTLTNSFNLSFSTP 620  
VRIRYASTNLRLFVQNSNNDFLVIYN--KTMNK-----DDDLTYQTFDLATNSN 617  
IRIRYASNGSANTRAVINLSIPGVAELG-MALNPTFSGTD--YTNLKYKDFQYLEFSN- 642  
LRIRYAAN--SPIVLNVSVYLVQSVSRGTTISTESTFSRPNNIIPDLKYEEFRYKDFDA 596  
ISHEYTSLPNNFMLSRLSNLEKYPENN-----FMIYWYNNNS 464  
VRVRYATNVSGQFNVIYINDKITLQTKFQNTVETIGE-----GKDLTYGSFGYIEYSTT 603  
VRIRYASTDTEFTLYLG-DTIEKNRFN--KTMNDN-----GASLTYTEFKFASFTTD 628  
VRIRYATNAPKTTVFLTGIDTISVELPSTTSRONPN-----ATDLTYADFGYVTFPRT 613  
VRIRYKCNYSKLLIRKWKGEYIQQIHNISPTYG-----AFSYLESFTITTTEN 614  
GDYVFDYDSRHWVAISKTIPLTDLQINTNVEITVYAKAE-----SGDHLKVTYK 659  
VRIRYASHGNCQFLMKRWEPSTGVAPRQWARRHNVQGT-----FNSMRYEAFKYLDI 616  
IRIRCASIGVSTISVDNWSSSPQVTVASTAASLDT-----LKYESFQYVSI 625  
IRIRYSTSSNGYLYIYSPN-TKIVLPTTLVDGQP-----TFDPMDFSAFRVVEV 600  
VRVRYTSTNGRLLVERWSPSSIINSYFFLPSTG-----PGDSFGYVDT 609

Fig. 1F

axmi014	LVTTFNQSGVEIIIIQNLSG-----YHLIVDKVEFIPIDIQIEKCTKCFEGDICRCEGVQ	657
cry1Aa	FNFSNGSSVFTLSAHVFN-----GNEVYIDRIEFVPAEVT-----FEA---EY	614
cry1Ac	FTSSLGN---IVGVNFSG---TAGVIIDRFEPVPTAT-----LEA---EY	616
cry1Ia	FSFLDVQSTFTIGAWNFS---GNEVYIDRIEFVPEVT-----YEA---EY	651
cry2Aa	VASDNTNVTLDINVTLSG---TPFDLMNIMFVPTNLP-----	630
cry3Aa1	FELSG--NNLQIGVGLSA---GDKVYIDKIEFIPVN-----	652
cry3Bb	MGFSGDKNELIIIGAESFVS---NEKVIYDKIEFIPVQL-----	652
cry4Aa	--EVKFPAPNQNIISLVFNRSVDVYNTVTVIDKIEFIPITRS-----	688
cry4Ba	IVPMRLSSNQLITIAIQPLNMTSNNQVIIDRIEIIPIITQS-----	644
cry6Aa	DWYNNSDWYNN-----	475
cry7Aa	IQFPDEHPKITLHLSLSN---NSSFYVDSIEFIPVDVN-----YAE---KE	644
cry8Aa	FQFRETQDKILLSMGDFSS---GQEVYIDRIEFIPVDET-----YEA---EQ	669
cry10Aa	VPNKTFEGEDTLLMTLYGTPNHSYN-IYIDKIEFIPITQS-----	660
cry16Aa	IFDLTMEVTPYGRQFVED---IPSLILDKIEFLPTN-----	648
cry19Ba	KDPAGPEEPPVFNRLISTG---TLVEKDYRELKGTFR-----VT	695
cry24Aa	FTITPEENNFAFTIDLESG---GDLFIDKIEFIPVS---GSAFEYE-----GKQ	659
cry25Aa	PGNYYFDSAPRIRLLRQPG---RLLVDRIEIIIPVNFFP-----	660
cry39Aa1	PASFRASVAGYTNFTIEAG---FGPVYIDKIEFIPDNTT-----TLEYEGGR	644
cry40Aa1	LVTTFNQSGVEIIIIQNLSD---TPINVDKVEFIPVN---STALEYE-----GKQ	651
axmi014	SLETKKEIVNSLFIN-----	672
cry1Aa	DLERAQKAVNELFTSSNQIGLKTVDYDHYDQVSNLVECLSEFCLDEKQELSEKVKHAK	674
cry1Ac	NLERAQKAVNALFTSTNQIGLKTVDYDHYDQVSNLVTYLSDEFCLDEKRELSEKVKHAK	676
cry1Ia	DFEKAQEKVTALFTSTNPRGLKTDVKDYHIDQVSNLVESLSDEFYLDKRELFEIVKYAK	711
cry2Aa	-----PLY-----	633
cry3Aa1	-----	---
cry3Bb	-----	---
cry4Aa	KLETVQQIINTFYANPIKNTLQSELTDYDIDQAAANLVECISEELYPKMKMLLLDEVKNAK	748
cry4Ba	NLESEREVNALFTNDAKDALNIGTTDYDIDQAAANLVECISEELYPKMKMLLLDEVKNAK	704
cry6Aa	-----	---
cry7Aa	KLEKAQKAVNTLFTFTE-GRNALQKVDVTDYKVDQVSIILVDCISGDLVPNEKRELQNLVKYAK	703
cry8Aa	DLEAAKAVNALFTNTKD-GLRPGVTDYEVNQAAANLVECLSDDLVPNEKRLLLFDAVREAK	728
cry10Aa	NIEKTQKIVNDLFVN-----	675
cry16Aa	-----	---
cry19Ba	ELNKAPLIIVENFGAGYIGGIRIVKIS-----	722
cry24Aa	NIEKTQKAVNDLFIN-----	674
cry25Aa	LSEQUENKSVDLSLFIN-----	675
cry39Aa1	DLEKTKNAVNDLFTN-----	659
cry40Aa1	SLEKAQDVVNDLFFVK-----	666

Fig. 1G